

AMENDMENTS TO THE SPECIFICATION

On page 1, please delete the first paragraph under the title and insert in its place the following new paragraph.

This application is a U.S. National Phase Application of International Application No. PCT/US05/04714 filed on February 11, 2005 and asserts priority to U.S. Application Serial No. 10/845,057 filed on May 13, 2004, which is a continuing application of U.S. Application Serial Number 10/778,908 filed on February 13, 2004. The specifications of International Application No. PCT/US05/04714, U.S. Application Serial No. 10/845,057, and U.S. Application Serial Number 10/778,908 are hereby incorporated by reference in their entirety.

On pages 19-26, please delete Tables 1 through 4 and insert in its place the following new Tables 1 through 4:

Table 1: Human, Mouse and Rat microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
hsa-miR-100	<u>SEQ ID NO. 1</u> AACCCGUAGAUCCGAACUUGUG	<u>SEQ ID NO. 307</u> CACAAGUUCGGAUCUACGGGUU
hsa-miR-103	<u>SEQ ID NO. 2</u> AGCAGCAUUGUACAGGGCUAUG	<u>SEQ ID NO. 308</u> CAUAGCCCUGUACAAUGCUGCU
hsa-miR-105-5p	<u>SEQ ID NO. 3</u> UCAAAUGCUCAGACUCCUGUGG	<u>SEQ ID NO. 309</u> CCACAGGAGUCUGAGCAUUUGA
hsa-miR-106a	<u>SEQ ID NO. 4</u> AAAAGUGCUUACAGUGCAGGU	<u>SEQ ID NO. 310</u> UACCUGCACUGUAAGCACUUUU
hsa-miR-106b	<u>SEQ ID NO. 5</u> UAAAGUGCUGACAGUGCAGAUA	<u>SEQ ID NO. 311</u> UAUCUGCACUGUCAGCACUUUA
hsa-miR-107	<u>SEQ ID NO. 6</u> AGCAGCAUUGUACAGGGCUAUC	<u>SEQ ID NO. 312</u> GAUAGCCCUGUACAAUGCUGCU
hsa-miR-10b	<u>SEQ ID NO. 7</u> UACCCUGUAGAACCGAAUUUGU	<u>SEQ ID NO. 313</u> ACAAAUUCGGUUCUACAGGGUA
hsa-miR-128b	<u>SEQ ID NO. 8</u> UCACAGUGAACCGGUCUUCUUC	<u>SEQ ID NO. 314</u> GAAAGAGACCGGUUCACUGUGA
hsa-miR-130b	<u>SEQ ID NO. 9</u> CAGUGCAAUGAUGAAAGGGCAU	<u>SEQ ID NO. 315</u> AUGCCUUUCAUCAUUGCACUG
hsa-miR-140-3p	<u>SEQ ID NO. 10</u> UACCAACAGGGUAGAACACCACGGA	<u>SEQ ID NO. 316</u> UCCGUGGUUCUACCCUGUGGU
hsa-miR-142-5p	<u>SEQ ID NO. 11</u> CCCAUAAAAGUAGAAAGCACUAC	<u>SEQ ID NO. 317</u> GUAGUGCUUUCUACUUUAUGGG
hsa-miR-151-5p	<u>SEQ ID NO. 12</u> UCGAGGAGCUCACAGCUAGUA	<u>SEQ ID NO. 318</u> UACUAGACUGUGAGCUCCUCGA
hsa-miR-155	<u>SEQ ID NO. 13</u> UUAAUGCUAAUCGUGAUAGGGG	<u>SEQ ID NO. 319</u> CCCCCUAUCACGAUUAGCAUUA
hsa-miR-181a	<u>SEQ ID NO. 14</u> AACAUUCAACGCUGUCGGUGAG	<u>SEQ ID NO. 320</u> CUCACCGACAGCGUUGAAUGUU
hsa-miR-181b	<u>SEQ ID NO. 15</u> AACAUUCAUUGCUGUCGGUGGG	<u>SEQ ID NO. 321</u> CCCACCGACAGCAAUGAAUGUU
hsa-miR-181c	<u>SEQ ID NO. 16</u> AACAUUCAACCUGUCGGUGAGU	<u>SEQ ID NO. 322</u> ACUCACCGACAGGUUGAAUGUU
hsa-miR-182	<u>SEQ ID NO. 17</u> UUUGGCAAUGGUAGAACUCACA	<u>SEQ ID NO. 323</u> UGUGAGUUCUACCAUUGCCAAA
hsa-miR-183	<u>SEQ ID NO. 18</u> UAUGGCACUGGUAGAAUUCACU	<u>SEQ ID NO. 324</u> AGUGAAUUCUACCAAGUGCCAUA
hsa-miR-184	<u>SEQ ID NO. 19</u> UGGACGGAGAACUGAUAAAGGU	<u>SEQ ID NO. 325</u> ACCCUUAUCAGUUCUCCGUCCA
hsa-miR-185	<u>SEQ ID NO. 20</u> UGGAGAGAAAGGCAGUUCCUGA	<u>SEQ ID NO. 326</u> UCAGGAACUGCCUUUCUCUCCA
hsa-miR-186	<u>SEQ ID NO. 21</u> CAAAGAAUUCUCCUUUUGGGCU	<u>SEQ ID NO. 327</u> AGCCCAAAAGGAGAAUUCUUUG
hsa-miR-187	<u>SEQ ID NO. 22</u> UCGUGUCUUGUGUUGCAGCCGG	<u>SEQ ID NO. 328</u> CGGGCUGCAACACAAAGACACGA
hsa-miR-188-3p	<u>SEQ ID NO. 23</u> CUCCCACAAUGCAGGGUUUGCAG	<u>SEQ ID NO. 329</u> CUGCAAACCCUGCAUGUGGGAG
hsa-miR-188-5p	<u>SEQ ID NO. 24</u> CAUCCCUUGCAUGGUGGAGGGU	<u>SEQ ID NO. 330</u> ACCCUCCACCAUGCAAGGGGAUG
hsa-miR-189	<u>SEQ ID NO. 25</u> GUGCCUACUGAGCUGAUAAUCAG	<u>SEQ ID NO. 331</u> CUGAUAAUCAGCUCAGUAGGCAC
hsa-miR-190	<u>SEQ ID NO. 26</u> UGAUAUGUUUGAUAAUUAAGGU	<u>SEQ ID NO. 332</u> ACCUAAUAUAUCAAACAUUA
hsa-miR-191	<u>SEQ ID NO. 27</u> CAACGGAAUCCAAAAGCAGCU	<u>SEQ ID NO. 333</u> AGCUGCUUUUGGGAUUCCGUUG
hsa-miR-192	<u>SEQ ID NO. 28</u> CUGACCUAUGAAUUGACAGCCA	<u>SEQ ID NO. 334</u> UGGCUGUCAAUUCAUAGGUCAG
hsa-miR-193-3p	<u>SEQ ID NO. 29</u> AACUGGCCUACAAAGUCCAGU	<u>SEQ ID NO. 335</u> ACUGGGACUUUGUAGGCCAGUU
hsa-miR-193-5p	<u>SEQ ID NO. 30</u> UGGGUUUUGCGGGCAAGAUGA	<u>SEQ ID NO. 336</u> UCAUCUUGCCCGCAAAGACCCA
hsa-miR-194	<u>SEQ ID NO. 31</u> UGUAACAGCAACUCCAUGUGGA	<u>SEQ ID NO. 337</u> UCCACAUUUGGAGUUGCUGUUACA
hsa-miR-195	<u>SEQ ID NO. 32</u> UAGCAGCACAGAAAUAUUGGCA	<u>SEQ ID NO. 338</u> UGCCAAUAUUCUGUGCUGCUA

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
hsa-miR-196	<u>SEQ ID NO. 33</u> UAGGUAGUUUCAUGUUGUUGGG	<u>SEQ ID NO. 339</u> CCCAACACAUGAAACUACCUA
hsa-miR-197	<u>SEQ ID NO. 34</u> UUCACCACCUUCUCCACCCAGC	<u>SEQ ID NO. 340</u> GCUGGGUGGAGAAGGUGGUGAA
hsa-miR-198	<u>SEQ ID NO. 35</u> GGUCCAGAGGGAGAUAGGUUC	<u>SEQ ID NO. 341</u> GAACCUAUCUCCCCUCUGGACC
hsa-miR-199a-3p	<u>SEQ ID NO. 36</u> ACAGUAGUCUGCACAUUGGUUA	<u>SEQ ID NO. 342</u> UAACCAAUGUGCAGACAUACUGU
hsa-miR-199a-5p	<u>SEQ ID NO. 37</u> CCCAGUGUUCAGACUACCUGUU	<u>SEQ ID NO. 343</u> AACAGGUAGUCUGAACACUGGG
hsa-miR-199b	<u>SEQ ID NO. 38</u> CCCAGUGUUUAGACUAUCUGUU	<u>SEQ ID NO. 344</u> AACAGAUAGCUAAACACUGGG
hsa-miR-200a	<u>SEQ ID NO. 39</u> UAACACUGUCUGGUACGAUGU	<u>SEQ ID NO. 345</u> ACAUCGUUACCAAGACAGUGUUA
hsa-miR-200b	<u>SEQ ID NO. 40</u> CUCUAAUACUGCCUGGUAAAUGA	<u>SEQ ID NO. 346</u> UCAUUACCAGGCAGUAAUAGAG
hsa-miR-200c	<u>SEQ ID NO. 41</u> AAUACUGCCGGGUAAAUGAUGGA	<u>SEQ ID NO. 347</u> UCCAUCAUUACCCGGCAGUAAU
hsa-miR-203	<u>SEQ ID NO. 42</u> GUGAAAUGUUUAGGACCACUAG	<u>SEQ ID NO. 348</u> CUAGUGGUCCUAAACAUUUCAC
hsa-miR-204	<u>SEQ ID NO. 43</u> UUCCCUUUGUCAUCCUAUGCCU	<u>SEQ ID NO. 349</u> AGGCAUAGGAUGACAAAGGGAA
hsa-miR-205	<u>SEQ ID NO. 44</u> UCCUCAUUCACCAGCGAGUCUG	<u>SEQ ID NO. 350</u> CAGACUCCGGUGGAAUGAAGGA
hsa-miR-206	<u>SEQ ID NO. 45</u> UGGAAUGUAAGGAAGUGUGUGG	<u>SEQ ID NO. 351</u> CCACACACUCCUACAUUCCA
hsa-miR-208	<u>SEQ ID NO. 46</u> AUAAGACGAGCAAAAGCUUGU	<u>SEQ ID NO. 352</u> ACAAGCUUUUUGCUCGUUUAU
hsa-miR-210	<u>SEQ ID NO. 47</u> CUGUGCGUGUGACAGCGGCUGA	<u>SEQ ID NO. 353</u> UCAGCCGUGUCACACGCACAG
hsa-miR-211	<u>SEQ ID NO. 48</u> UUCCCUUUGUCAUCCUUCGCCU	<u>SEQ ID NO. 354</u> AGGCGAAGGAUGACAAAGGGAA
hsa-miR-212	<u>SEQ ID NO. 49</u> UAACAGUCUCCAGUCACGGCCA	<u>SEQ ID NO. 355</u> UGGCCGUGACUGGAGACUGUUA
hsa-miR-213	<u>SEQ ID NO. 50</u> ACCAUCGACCGUUGAUUGUACC	<u>SEQ ID NO. 356</u> GGUACAAUCAACGGUCGAUGGU
hsa-miR-214	<u>SEQ ID NO. 51</u> ACAGCAGGCACAGACAGGCAGU	<u>SEQ ID NO. 357</u> ACUGCCUGUCUGUGCCUGCUGU
hsa-miR-215	<u>SEQ ID NO. 52</u> AUGACCUAUGAAUUGACAGACAA	<u>SEQ ID NO. 358</u> UGUCUGUCAAUUCAUAGGUCAU
hsa-miR-216	<u>SEQ ID NO. 53</u> UAAUCUCAGCUGGCAACUGUGA	<u>SEQ ID NO. 359</u> UCACAGUUGCCAGCUGAGAUUA
hsa-miR-217	<u>SEQ ID NO. 54</u> UACUGCAUCAGGAACUGAUUUGG	<u>SEQ ID NO. 360</u> CCAAUCAGUUCCUGAUGCAGUA
hsa-miR-218	<u>SEQ ID NO. 55</u> UUGUGCUUGUAUCUACCAUGUG	<u>SEQ ID NO. 361</u> CACAUGGUUAGAUCAAGCACAA
hsa-miR-219	<u>SEQ ID NO. 56</u> UGAUUGUCCAAACGCAAUUCUU	<u>SEQ ID NO. 362</u> AAGAAUUGCNUUUGGACAAUCA
hsa-miR-220	<u>SEQ ID NO. 57</u> CCACACCGUAUCUGACACUUUG	<u>SEQ ID NO. 363</u> CAAAGUGUCAGAUACGGUGUGG
hsa-miR-221	<u>SEQ ID NO. 58</u> AGCUACAUUGUCUGCUGGGUUU	<u>SEQ ID NO. 364</u> AAACCCAGCAGACAAUGUAGCU
hsa-miR-222	<u>SEQ ID NO. 59</u> AGCUACAUUCUGGUACUGGGUC	<u>SEQ ID NO. 365</u> GACCCAGUAGCCAGAUGUAGCU
hsa-miR-223	<u>SEQ ID NO. 60</u> UGUCAGUUUGUCAAACUACCCA	<u>SEQ ID NO. 366</u> UGGGUAAUUGACAAACUGACA
hsa-miR-224	<u>SEQ ID NO. 61</u> CAAGUCACUAGUGGUUCCGUUU	<u>SEQ ID NO. 367</u> AAACGGAACCACUAGUGACUUG
hsa-miR-28-5p	<u>SEQ ID NO. 62</u> AAGGAGCUCACAGUCUAUUGAG	<u>SEQ ID NO. 368</u> CUAAUAGACUGUGAGCUCCUU
hsa-miR-290	<u>SEQ ID NO. 63</u> CUCAAACUGUGGGGGCACUUUC	<u>SEQ ID NO. 369</u> GAAAGUGCCCCACAGUUUGAG
hsa-miR-296	<u>SEQ ID NO. 64</u> AGGGCCCCCCCUCAAUCCUGUU	<u>SEQ ID NO. 370</u> AACAGGAUUGAGGGGGGGCCU
hsa-miR-299	<u>SEQ ID NO. 65</u> UGGUUUACCGUCCCACAUACAU	<u>SEQ ID NO. 371</u> AUGUAUGUGGGACGGUAAACCA
hsa-miR-301	<u>SEQ ID NO. 66</u> CAGUGCAAUAGUAUUGUCAAAG	<u>SEQ ID NO. 372</u> CUUUGACAAUACAUUUGCACUG
hsa-miR-302	<u>SEQ ID NO. 67</u> UAAGUGCUUCCAUGUUUUGGUG	<u>SEQ ID NO. 373</u> CACCAAAACAUGGAAGCACUUA
hsa-miR-30e	<u>SEQ ID NO. 68</u> UGUAAAACAUCUUGACUGGAAG	<u>SEQ ID NO. 374</u> CUUCCAGUCAAGGAUGUUUACA
hsa-miR-320	<u>SEQ ID NO. 69</u> AAAAGCUGGGUUGAGAGGGCGA	<u>SEQ ID NO. 375</u> UCGCCCUCUCAACCCAGCUUUU
hsa-miR-321	<u>SEQ ID NO. 70</u> UAAGCCAGGGAUUGUGGGUUCG	<u>SEQ ID NO. 376</u> CGAACCCACAAUCCUGGUUA
hsa-miR-322	<u>SEQ ID NO. 71</u> AAACAUGAAUUGCUGCUUAUC	<u>SEQ ID NO. 377</u> GAUACAGCAGCAAUCAUGUUU
hsa-miR-323	<u>SEQ ID NO. 72</u> GCACAUUACACGGUCGACCUCU	<u>SEQ ID NO. 378</u> AGAGGUCGACCGUGUAAUGUGC
hsa-miR-324-3p	<u>SEQ ID NO. 73</u> CCACUGCCCCAGGUGCUGGUUG	<u>SEQ ID NO. 379</u> CCAGCAGCACCUGGGCAGUGG
hsa-miR-324-5p	<u>SEQ ID NO. 74</u> CGCAUCCCCUAGGGCAUUGGUG	<u>SEQ ID NO. 380</u> CACCAAUGCCUAGGGGAUGCG
hsa-miR-326	<u>SEQ ID NO. 75</u> CCUCUGGGCCCUCUCCUCCAGCC	<u>SEQ ID NO. 381</u> GGCUGGAGGAAGGGCCCAGAGG
hsa-miR-328	<u>SEQ ID NO. 76</u> CUGGCCUCUCUGCCCUUCCGU	<u>SEQ ID NO. 382</u> ACGGAAGGGCAGAGAGGGCCAG
hsa-miR-329	<u>SEQ ID NO. 77</u> AACACACCCAGCUAACCUUUUU	<u>SEQ ID NO. 383</u> AAAAAGGUUAGCUGGGUGUGUU
hsa-miR-34a	<u>SEQ ID NO. 78</u> UGGCAGUGCUUAGCUGGUUGU	<u>SEQ ID NO. 384</u> ACAACCAGCUAAGACACUGCCA
hsa-miR-34b	<u>SEQ ID NO. 79</u> AGGCAGUGUCAUUAGCUGAUUG	<u>SEQ ID NO. 385</u> CAAUCAGCUAAUGACACUGCCU
hsa-miR-34c	<u>SEQ ID NO. 80</u> AGGCAGUGUAGUAGCUGAUUG	<u>SEQ ID NO. 386</u> CAAUCAGCUAACUACACUGCCU
hsa-miR-92	<u>SEQ ID NO. 81</u> UAUUGCACUUGUCCCGGCCUGU	<u>SEQ ID NO. 387</u> ACAGGCCGGACAAGUGCAAUA
hsa-miR-93	<u>SEQ ID NO. 82</u> AAAGUGCUGUUCGUGCAGGUAG	<u>SEQ ID NO. 388</u> CUACCUGCACGAACAGCACUUU
hsa-miR-95	<u>SEQ ID NO. 83</u> UUCAACGGGUUUUAUUGAGCA	<u>SEQ ID NO. 389</u> UGCUCAAUAAAACCCGUUGAA
hsa-miR-96	<u>SEQ ID NO. 84</u> UUUGGCACUAGCACAUUUUUGC	<u>SEQ ID NO. 390</u> GCAAAAAUGUGCUAGUGCCAAA
hsa-miR-98	<u>SEQ ID NO. 85</u> UGAGGUAGUAAGUUGUAUUGUU	<u>SEQ ID NO. 391</u> AACAAUACAACUUACUACCUCA
mmu-miR-106a	<u>SEQ ID NO. 86</u> CAAAGUGCUAACAGUGCAGGUA	<u>SEQ ID NO. 392</u> UACCUGCACGUUAGCACUUUUG
mmu-miR-10b	<u>SEQ ID NO. 87</u> CCCUGUAGAACCGAAUUGUGU	<u>SEQ ID NO. 393</u> ACACAAAUCGGUUCUACAGGG

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
mmu-miR-135b	<u>SEQ ID NO. 88</u> UAUGGCUUUUCAUUCCUAUGUG	<u>SEQ ID NO.394</u> CACAUAGGAAUGAAAAGCCAUA
mmu-miR-148b	<u>SEQ ID NO. 89</u> UCAGUGCAUCACAGAACUUUGU	<u>SEQ ID NO.395</u> ACAAAAGUUCUGUGAUGCACUGA
mmu-miR-151-3p	<u>SEQ ID NO. 90</u> CUAGACUGAGGCUCUUGAGGA	<u>SEQ ID NO.396</u> UCCUCAAGGAGGCCUCAGCUAG
mmu-miR-155	<u>SEQ ID NO. 91</u> UUAAUGCUAAUUGUGAUAGGGG	<u>SEQ ID NO.397</u> CCCCUAUCACAUUAGCAUUAA
mmu-miR-199b	<u>SEQ ID NO. 92</u> CCCAGUGUUUAGACUACCUGUU	<u>SEQ ID NO.398</u> AACAGGUAGUCUAAACACUGGG
mmu-miR-200b	<u>SEQ ID NO. 93</u> UAAUACUGCCUGGUAAUGAUGA	<u>SEQ ID NO.399</u> UCAUCAUUACCAGGCAGUAUUA
mmu-miR-203	<u>SEQ ID NO. 94</u> UGAAAUGUUUAGGACCACUAGA	<u>SEQ ID NO.400</u> UCUAGUGGUCCUAAACAUUUC
mmu-miR-211	<u>SEQ ID NO. 95</u> UUCCCUUUGUCAUCCUUUGCCU	<u>SEQ ID NO.401</u> AGGCAAAGGAUGACAAAGGGAA
mmu-miR-217	<u>SEQ ID NO. 96</u> UACUGCAUCAGGAACUGACUGG	<u>SEQ ID NO.402</u> CCAGUCAGUCCUGAUGCAGUA
mmu-miR-224	<u>SEQ ID NO. 97</u> UAAGUCACUAGUGGUUCCGUUU	<u>SEQ ID NO.403</u> AAACGGAACCACUAGUGACUUA
mmu-miR-28-3p	<u>SEQ ID NO. 98</u> CACUAGAUUGUGAGCUGCUGGA	<u>SEQ ID NO.404</u> UCCAGCAGCUCACAAUCUAGUG
mmu-miR-290	<u>SEQ ID NO. 99</u> CUCAAACUAUGGGGGCACUUUU	<u>SEQ ID NO.405</u> AAAAGUGCCCCAUAGUUUGAG
mmu-miR-291-3p	<u>SEQ ID NO. 100</u> AAAGUGCUUCCACUUUGUGUGC	<u>SEQ ID NO.406</u> GCACACAAAGUGGAAGCACUUU
mmu-miR-291-5p	<u>SEQ ID NO. 101</u> CAUCAAAGUGGAGGCCUCUCU	<u>SEQ ID NO.407</u> AGAGAGGGCCUCCACUUUGAUG
mmu-miR-292-3p	<u>SEQ ID NO. 102</u> AAGUGCCGCCAGGUUUUGAGUG	<u>SEQ ID NO.408</u> CACUAAAACCUGGCGGCACUU
mmu-miR-292-5p	<u>SEQ ID NO. 103</u> ACUAAAACUGGGGGCUCUUUUG	<u>SEQ ID NO.409</u> CAAAAGAGCCCCAGUUUGAGU
mmu-miR-293	<u>SEQ ID NO. 104</u> AGUGCCCGCAGAGUUUGUAGUGU	<u>SEQ ID NO.410</u> ACACUACAAACUCUGCGGCACU
mmu-miR-294	<u>SEQ ID NO. 105</u> AAAGUGCUUCCCUUUUGUGUGU	<u>SEQ ID NO.411</u> ACACACAAAAGGGAAGCACUUU
mmu-miR-295	<u>SEQ ID NO. 106</u> AAAGUGCUACUACUUUUGAGUC	<u>SEQ ID NO.412</u> GACUAAAAGUAGUAGCACUUU
mmu-miR-297	<u>SEQ ID NO. 107</u> AUGUAUGUGUGCAUGUGCAUGU	<u>SEQ ID NO.413</u> ACAUGCACAUGCACACAUACAU
mmu-miR-298	<u>SEQ ID NO. 108</u> GGCAGAGGAGGGCUGUUCUCC	<u>SEQ ID NO.414</u> GGAAGAACAGCCCUCUCUGCC
mmu-miR-300	<u>SEQ ID NO. 109</u> UAUGCAAGGGCAAGCUCUCUUC	<u>SEQ ID NO.415</u> GAAGAGAGCUUGCCCUCUGCAUA
mmu-miR-31	<u>SEQ ID NO. 110</u> AGGCAAGAUGCUGGCAUAGCUG	<u>SEQ ID NO.416</u> CAGCUAUGCAGCAUCUUGCCU
mmu-miR-322	<u>SEQ ID NO. 111</u> AAACAUGAAGCGCUGCAACACC	<u>SEQ ID NO.417</u> GGUGUUGCAGCGCUUCAUGUUU
mmu-miR-325	<u>SEQ ID NO. 112</u> CCUAGUAGGUGCUCAGUAAGUG	<u>SEQ ID NO.418</u> CACUUACUGAGCACCACUAGG
mmu-miR-326	<u>SEQ ID NO. 113</u> CCUCUGGGCCCUUCCUCCAGUC	<u>SEQ ID NO.419</u> GACUGGAGGAAGGGCCCAGAGG
mmu-miR-330	<u>SEQ ID NO. 114</u> GCAAAGCACAGGGCCUGCAGAG	<u>SEQ ID NO.420</u> CUCUGCAGGCCUGUGCUUUGC
mmu-miR-331	<u>SEQ ID NO. 115</u> GCCCCUUGGCCUAUCCUAGAAC	<u>SEQ ID NO.421</u> GUUCUAGGAUAGGCCAGGGC
mmu-miR-337	<u>SEQ ID NO. 116</u> UUCAGCUCCUAUAUGAUGCCUU	<u>SEQ ID NO.422</u> AAGGCAUCAUAUAGGAGCUGAA
mmu-miR-338	<u>SEQ ID NO. 117</u> UCCAGCAUCAGUGAUUUUGUUG	<u>SEQ ID NO.423</u> CAACAAAUCACUGAUGCUGGA
mmu-miR-339	<u>SEQ ID NO. 118</u> UCCCUGGUCCUCCAGGAGCUCAC	<u>SEQ ID NO.424</u> GUGAGCUCCUGGAGGACAGGGA
mmu-miR-340	<u>SEQ ID NO. 119</u> UCCGUCUCAGUUACUUUAUAGC	<u>SEQ ID NO.425</u> GCUUAAGUAACUGAGACCGGA
mmu-miR-341	<u>SEQ ID NO. 120</u> UCGAUCGGUCGGUCGGUCAGUC	<u>SEQ ID NO.426</u> GACUGACCGACCGACCGAUCGA
mmu-miR-342	<u>SEQ ID NO. 121</u> UCUCACACAGAAAUCGCACCCG	<u>SEQ ID NO.427</u> CGGGUGCGAUUUCUGUGUGAGA
mmu-miR-344	<u>SEQ ID NO. 122</u> UGAUCUAGCCAAAGCCUGACUG	<u>SEQ ID NO.428</u> CAGUCAGGCCUUUGGUAGAUCA
mmu-miR-345	<u>SEQ ID NO. 123</u> UGCUGACCCCUAGUCCAGUGCU	<u>SEQ ID NO.429</u> AGCACUGGACUAGGGGUCAGCA
mmu-miR-346	<u>SEQ ID NO. 124</u> UGUCUGCCGAGUGCCUGCCUC	<u>SEQ ID NO.430</u> GAGGCAGGCACUCGGGCAGACA
mmu-miR-34b	<u>SEQ ID NO. 125</u> UAGGCAGUGUAUUUAGCUGAUU	<u>SEQ ID NO.431</u> AAUCAGCUAAUUAACACUGCCUA
mmu-miR-350	<u>SEQ ID NO. 126</u> UUCACAAAGCCCAUACACUUUC	<u>SEQ ID NO.432</u> GAAAGUGUAUGGGCUUUGUGAA
mmu-miR-351	<u>SEQ ID NO. 127</u> UCCCUGAGGAGGCCUUUUGAGCC	<u>SEQ ID NO.433</u> GGCUCAAAGGGCUCCUCAGGGGA
mmu-miR-7b	<u>SEQ ID NO. 128</u> UGGAAGACUUGUGAUUUUGUUG	<u>SEQ ID NO.434</u> CAACAAAUCACAAGUCUCCA
mmu-miR-92	<u>SEQ ID NO. 129</u> UAUUGCACUUGUCCCCGCCUGA	<u>SEQ ID NO.435</u> UCAGGCCGGACAAGUGCAAUA
mmu-miR-93	<u>SEQ ID NO. 130</u> CAAAGUGCUGUUCUGUGCAGGUA	<u>SEQ ID NO.436</u> UACCUGCACGAACAGCACUUUG
mo-miR-327	<u>SEQ ID NO. 131</u> CCUUGAGGGCAUGAGGGUAGU	<u>SEQ ID NO.437</u> ACUACCCUCAUGCACCUAAGG
mo-miR-333	<u>SEQ ID NO. 132</u> GUGGUGUGCUAGUUACUUUUGG	<u>SEQ ID NO.438</u> CCAAAAGUAACUAGCACACCAC
mo-miR-335	<u>SEQ ID NO. 133</u> UCAAGAGCAAUAACGAAAAAUG	<u>SEQ ID NO.439</u> CAUUUUUCGUUAUUGCUCUUGA
mo-miR-336	<u>SEQ ID NO. 134</u> UCACCCUCCAUACUAGUCUC	<u>SEQ ID NO.440</u> GAGACUAGAUUAUGGAAGGGUGA
mo-miR-343	<u>SEQ ID NO. 135</u> UCUCCCUCGUGUGCCAGUAU	<u>SEQ ID NO.441</u> AUACUGGGCACACGGAGGGAGA
mo-miR-347	<u>SEQ ID NO. 136</u> UGUCCCCUCUGGGUCGCCAGCU	<u>SEQ ID NO.442</u> AGCUGGGCGACCCAGAGGGGACA
mo-miR-349	<u>SEQ ID NO. 137</u> CAGCCCUCUGCUGCUUAACCUCU	<u>SEQ ID NO.443</u> AGAGGUUAAGACAGCAGGGCUG
mo-miR-352	<u>SEQ ID NO. 138</u> AGAGUAGUAGGUUGCAUAGUAC	<u>SEQ ID NO.444</u> GUACUAUGCAACCUACUACUCU

Table 2: Novel Human microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
hsa-miR-361	<u>SEQ ID NO. 139</u> UUAUCAGAAUCUCCAGGGGUAC	<u>SEQ ID NO.445</u> GUACCCCUGGAGAUUCUGAUAA
hsa-miR-362	<u>SEQ ID NO. 140</u> AAUCCUUGGAACCUAGGUGUGA	<u>SEQ ID NO.446</u> UCACACCUAGGUUCCAAGGAUU
hsa-miR-363	<u>SEQ ID NO. 141</u> AUUGCACGGUAUCCAUCUGUAA	<u>SEQ ID NO.447</u> UUACAGAUGGAUACCUGUGCAAU
hsa-miR-364	<u>SEQ ID NO. 142</u> CGGCAGGGACGGCGAUUGGUCC	<u>SEQ ID NO.448</u> GGACCAAUCGCCGUCCCCGCCG
hsa-miR-365	<u>SEQ ID NO. 143</u> UAAUGCCCCUAAAAAUCCUUAU	<u>SEQ ID NO.449</u> AUAAGGAUUUUUAGGGGCAUUA
hsa-miR-366	<u>SEQ ID NO. 144</u> UAACUGGUUGAACACUGAACCC	<u>SEQ ID NO.450</u> GGUUCAGUUGUCAACCAGUUA

Table 3: C. elegans microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Cel-let-7	<u>SEQ ID NO. 145</u> UGAGGUAGUAGGUUGUAUAGUU	<u>SEQ ID NO.451</u> AACUAUACAACCUACUACCUA
Cel-lin-4	<u>SEQ ID NO. 146</u> UC ₃ CUGAGACCUCAGUGUGAG	<u>SEQ ID NO.452</u> CUCACACUUGAGGUCAGGGAA
Cel-miR-1	<u>SEQ ID NO. 147</u> UGGAAUGUAAAGAAGUAUGUAG	<u>SEQ ID NO.453</u> CUACAUACUUCUUUACAUCCA
Cel-miR-2	<u>SEQ ID NO. 148</u> UAUCACAGCCAGCUUUGAUGUG	<u>SEQ ID NO.454</u> CACAUCAAAGCUGGCUGUGAU
Cel-miR-34	<u>SEQ ID NO. 149</u> AGGCAGUGUGGUUAGCUGGUUG	<u>SEQ ID NO.455</u> CAACCAGCUAACCAACACUGCCU
Cel-miR-35	<u>SEQ ID NO. 150</u> UCACCGGGUGGAAACUAGCAGU	<u>SEQ ID NO.456</u> ACUGCUAGUUUCCACCCGGUGA
Cel-miR-36	<u>SEQ ID NO. 151</u> UCACCGGGUGAAAAUUCGCAUG	<u>SEQ ID NO.457</u> CAUGCAGAUUUUACACCCGGUGA
Cel-miR-37	<u>SEQ ID NO. 152</u> UCACCGGGUGAACACUUGCAGU	<u>SEQ ID NO.458</u> ACUGCAAGUGUUCACCCGGUGA
Cel-miR-38	<u>SEQ ID NO. 153</u> UCACCGGGAGAAAAACUGGAGU	<u>SEQ ID NO.459</u> ACUCCAGUUUUCUCCCGGUGA
Cel-miR-39	<u>SEQ ID NO. 154</u> UCACCGGGUGUAAAUCAGCUUG	<u>SEQ ID NO.460</u> CAAGCUGAUUUACACCCGGUGA
Cel-miR-40	<u>SEQ ID NO. 155</u> UCACCGGGUGUACAUCAUCUAA	<u>SEQ ID NO.461</u> UUAGCUGAUGUACACCCGGUGA
Cel-miR-41	<u>SEQ ID NO. 156</u> UCACCGGGUGAAAAAUCACCUA	<u>SEQ ID NO.462</u> UAGGUGAUUUUUCACCCGGUGA
Cel-miR-42	<u>SEQ ID NO. 157</u> CACCGGGUUAACAUCAUCACAGAG	<u>SEQ ID NO.463</u> CUCUGUAGAUGUUAACCCGGUG
Cel-miR-43	<u>SEQ ID NO. 158</u> UAUCACAGUUUACUUGCUGUCG	<u>SEQ ID NO.464</u> CGACAGCAAGUAAACUGUGAU
Cel-miR-44	<u>SEQ ID NO. 159</u> UGACUAGAGACACAUUCAGCUU	<u>SEQ ID NO.465</u> AAGCUGAAUGUGUCUAGUCA
Cel-miR-45	<u>SEQ ID NO. 160</u> UGACUAGAGACACAUUCAGCUU	<u>SEQ ID NO.466</u> AAGCUGAAUGUGUCUAGUCA
Cel-miR-46	<u>SEQ ID NO. 161</u> UGUCAUGGAGUCGCUCUUCUCA	<u>SEQ ID NO.467</u> UGAAGAGAGCGACUCCAUGACA
Cel-miR-47	<u>SEQ ID NO. 162</u> UGUCAUGGAGGCGCUCUUCUCA	<u>SEQ ID NO.468</u> UGAAGAGAGCGCCUCCAUGACA
Cel-miR-48	<u>SEQ ID NO. 163</u> UGAGGUAGGCUCAGUAGAUGCG	<u>SEQ ID NO.469</u> CGCAUCUACUGAGGCCUACCUA
Cel-miR-49	<u>SEQ ID NO. 164</u> AAGCACCACGAGAAGCUGCAGA	<u>SEQ ID NO.470</u> UCUGCAGCUUCUCGUGGUGCUU
Cel-miR-50	<u>SEQ ID NO. 165</u> UGAUAUGUCUGGUUUUCUUGGG	<u>SEQ ID NO.471</u> CCCAAGAAUACCAGACAUAUCA
Cel-miR-51	<u>SEQ ID NO. 166</u> UACCCGUAGCUCCUAUCCAUGU	<u>SEQ ID NO.472</u> ACAUGGAUAGGAGCUACGGUA
Cel-miR-52	<u>SEQ ID NO. 167</u> CACCCGUACAU AUGUUUCCGUG	<u>SEQ ID NO.473</u> CACGGAAACAU AUGUACGGUG
Cel-miR-53	<u>SEQ ID NO. 168</u> CACCCGUACAUUUGUUUCCGUG	<u>SEQ ID NO.474</u> CACGGAAACAAAUGUACGGUG
Cel-miR-54	<u>SEQ ID NO. 169</u> UACCCGUAAUCUCAUAAUCCG	<u>SEQ ID NO.475</u> CGGAUUAUGAAGAUUACGGUA
Cel-miR-55	<u>SEQ ID NO. 170</u> UACCCGUAAUAGUUUCUGCUGA	<u>SEQ ID NO.476</u> UCAGCAGAAACUUAUACGGUA
Cel-miR-56	<u>SEQ ID NO. 171</u> UACCCGUAAUUGUUUCCGUGAG	<u>SEQ ID NO.477</u> CUCAGCGAAACAUUACGGUA
Cel-miR-57	<u>SEQ ID NO. 172</u> UACCCGUAGAUCGAGCUGUGU	<u>SEQ ID NO.478</u> ACACAGCUCGAUCUACAGGGUA
Cel-miR-58	<u>SEQ ID NO. 173</u> UGAGAUCGUUCAGUACGGCAAU	<u>SEQ ID NO.479</u> AUUGCUGUACUGAACGAUCUCA
Cel-miR-59	<u>SEQ ID NO. 174</u> UCGAAUCGUUUUACAGGAUGAU	<u>SEQ ID NO.480</u> AUCAUCCUGAUAAACGAUUCGA
Cel-miR-60	<u>SEQ ID NO. 175</u> UAUUAUGCACAUUUUCUAGUUC	<u>SEQ ID NO.481</u> GAACUAGAAAUGUGCAUAAA
Cel-miR-61	<u>SEQ ID NO. 176</u> UGACUAGAACCGUUACUCAUCU	<u>SEQ ID NO.482</u> AGAUGAGUAACGGUUCUAGUCA
Cel-miR-62	<u>SEQ ID NO. 177</u> UGAAUAGUAAUCUAGCUUACAG	<u>SEQ ID NO.483</u> CUGUAAGCUAGAUUACAUAUCA
Cel-miR-63	<u>SEQ ID NO. 178</u> AUGACACUGAAGCGAGUUGGAA	<u>SEQ ID NO.484</u> UUCCAACUCGCUCUUCAGUGUCAU
Cel-miR-64	<u>SEQ ID NO. 179</u> UAUGACACUGAAGCGUUACCGA	<u>SEQ ID NO.485</u> UCGGUAAACGCUCUUCAGUGUCAU
Cel-miR-65	<u>SEQ ID NO. 180</u> UAUGACACUGAAGCGUAACCGA	<u>SEQ ID NO.486</u> UCGGUUACGCUCUUCAGUGUCAU
Cel-miR-66	<u>SEQ ID NO. 181</u> CAUGACACUGAUUAGGGGAUGUG	<u>SEQ ID NO.487</u> CACAUCCCUCAUACAGUGUCAUG
Cel-miR-67	<u>SEQ ID NO. 182</u> UCACAACCUCCUAGAAAGAGUA	<u>SEQ ID NO.488</u> UACUCUUUCUAGGAGGUUGUGA
Cel-miR-68	<u>SEQ ID NO. 183</u> UCGAAGACUCAAAAGUGUAGAC	<u>SEQ ID NO.489</u> GUCUACACUUUUGAGCUUCGA
Cel-miR-69	<u>SEQ ID NO. 184</u> UCGAAAAUUAAAAGUGUAGAA	<u>SEQ ID NO.490</u> UUCUACACUUUUAAAUCUUCGA
Cel-miR-70	<u>SEQ ID NO. 185</u> UAAUACGUCGUUGGUUUUCCA	<u>SEQ ID NO.491</u> UGGAAACACCAACCGACGUUA
Cel-miR-71	<u>SEQ ID NO. 186</u> UGAAAGACAUGGGUAGUGAAGC	<u>SEQ ID NO.492</u> CGUUCACUACCCAUUGCUUUCA
Cel-miR-72	<u>SEQ ID NO. 187</u> AGGCAAGAUGUUGGUCAUGCUG	<u>SEQ ID NO.493</u> CAGCUAUGCCAACAUUUCGCCU
Cel-miR-73	<u>SEQ ID NO. 188</u> UGGCAAGAUGUAGGCAGUUCAG	<u>SEQ ID NO.494</u> CUGAACUGCCUACAUUUCGCCA
Cel-miR-74	<u>SEQ ID NO. 189</u> UGGCAAGAAAUGGCAGCUAC	<u>SEQ ID NO.495</u> UGUAGACUGCCAUUUCUUCGCCA
Cel-miR-75	<u>SEQ ID NO. 190</u> UAAAAGCUACCAACCGGCUUCA	<u>SEQ ID NO.496</u> UGAAGCCGGUUGGUAGCUUUUA
Cel-miR-76	<u>SEQ ID NO. 191</u> UUCGUUGUUGAUGAAGCCUUGA	<u>SEQ ID NO.497</u> UCAAGGCUUCAUCAACAACGAA
Cel-miR-77	<u>SEQ ID NO. 192</u> UUCAUCAGGCCAUAGCUGUCCA	<u>SEQ ID NO.498</u> UGGACAGCUAUGGCCUGAUGAA
Cel-miR-78	<u>SEQ ID NO. 193</u> UGGAGGCCUGGUUGUUUGUGCU	<u>SEQ ID NO.499</u> AGCACAAACAACCAGGCCUCCA
Cel-miR-79	<u>SEQ ID NO. 194</u> AUAAAGCUAGGUUACCAAAGCU	<u>SEQ ID NO.500</u> AGCUUUGGUACCUAGCUUUUA
Cel-miR-227	<u>SEQ ID NO. 195</u> AGCUUUUCGACAUGAUUCUGAAC	<u>SEQ ID NO.501</u> GUUCAGAAUCAUGUCGAAAGCU
Cel-miR-80	<u>SEQ ID NO. 196</u> UGAGAUCAUUAGUUGAAAGCCG	<u>SEQ ID NO.502</u> CGGCUUUCAACUAAUGAUCUCA
Cel-miR-81	<u>SEQ ID NO. 197</u> UGAGAUCAUCGUGAAAGCUAGU	<u>SEQ ID NO.503</u> ACUAGCUUUCACGAUGAUCUCA

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Cel-miR-82	<u>SEQ ID NO. 198</u> UGAGAUCAUCGUGAAAGCCAGU	<u>SEQ ID NO.504</u> ACUGGCUUCACGAUGAUCUCA
Cel-miR-83	<u>SEQ ID NO. 199</u> UAGCACCAUAUAAAUCAGUAA	<u>SEQ ID NO.505</u> UUACUGAAUUUAUAUGGUGCUA
Cel-miR-84	<u>SEQ ID NO. 200</u> UGAGGUAGUAUGUAAAUCAGU	<u>SEQ ID NO.506</u> UACAAUAAUACAUACUACCUCA
Cel-miR-85	<u>SEQ ID NO. 201</u> UACAAAGUAUUUGAAAAGUCGU	<u>SEQ ID NO.507</u> ACGACUUUCAAAUACUUUGUA
Cel-miR-86	<u>SEQ ID NO. 202</u> UAAGUGAAUGCUCUUGCCACAGU	<u>SEQ ID NO.508</u> ACUGUGGCAAAGCAUUCACUUA
Cel-miR-87	<u>SEQ ID NO. 203</u> GUGAGCAAAGUUUCAGGUGUGC	<u>SEQ ID NO.509</u> GCACACCUGAAACUUUGCUCAC
Cel-miR-90	<u>SEQ ID NO. 204</u> UGAUAUGUUGUUUGAAUGCCCC	<u>SEQ ID NO.510</u> GGGGCAUUCAAACAACAUUAUCA
Cel-miR-124	<u>SEQ ID NO. 205</u> UAAGGCACGCGGUGAAUGCCAC	<u>SEQ ID NO.511</u> GUGGCAUUCACCGCGUGCCUUA
Cel-miR-228	<u>SEQ ID NO. 206</u> AAUGGCACUGCAUGAAUUCACG	<u>SEQ ID NO.512</u> CGUGAAUUCAUGCAGUGCCAUU
Cel-miR-229	<u>SEQ ID NO. 207</u> AAUGACACUGGUUAUCUUUUC	<u>SEQ ID NO.513</u> GGAAAAGAUAAACCAAGUGUCAUU
Cel-miR-230	<u>SEQ ID NO. 208</u> GUAAUAGUUGUGCGACCAGGAG	<u>SEQ ID NO.514</u> CUCCUGGUCGCACAACUAAUAC
Cel-miR-231	<u>SEQ ID NO. 209</u> UAAGCUCGUGAUCAACAGGCAG	<u>SEQ ID NO.515</u> CUGCCUGUUGAUCACGAGCUUA
Cel-miR-232	<u>SEQ ID NO. 210</u> UAAAUGCAUCUUAACUGCGGUG	<u>SEQ ID NO.516</u> CACCGCAGUUAAGAUGCAUUUA
Cel-miR-233	<u>SEQ ID NO. 211</u> UUGAGCAAUGCACAUUGUGCGGG	<u>SEQ ID NO.517</u> CCCGCACAUGCGCAUUGCUCAA
Cel-miR-234	<u>SEQ ID NO. 212</u> UUUUUGCUCGAGAAUACCCUUU	<u>SEQ ID NO.518</u> AAAGGGUAUUCUCGAGCAUUA
Cel-miR-235	<u>SEQ ID NO. 213</u> UAUUGCACUCUCCCCGGCCUGA	<u>SEQ ID NO.519</u> UCAGGCCGGGGAGAGUGCAAUA
Cel-miR-236	<u>SEQ ID NO. 214</u> UAAAACUGUCAGGUAAUGACGC	<u>SEQ ID NO.520</u> GCGUCAUUACCUUGACAGUAUUA
Cel-miR-237	<u>SEQ ID NO. 215</u> UCCCUGAGAAUUCUCGAACAGC	<u>SEQ ID NO.521</u> GCUGUUCGAGAAUUCUCAGGGA
Cel-miR-238	<u>SEQ ID NO. 216</u> UUUGUACUCCGAUGCCAUCUAG	<u>SEQ ID NO.522</u> CUGAAUGGCAUCGGAGUACAAA
Cel-miR-239a	<u>SEQ ID NO. 217</u> UUUGUACUACACAUAGGUACUG	<u>SEQ ID NO.523</u> CAGUACCUAUGUGUAGUACAAA
Cel-miR-239b	<u>SEQ ID NO. 218</u> UUUGUACUACACAAAAGUACUG	<u>SEQ ID NO.524</u> CAGUACUUUUGUGUAGUACAAA
Cel-miR-240	<u>SEQ ID NO. 219</u> UACUGGCCAAAAUCUUCGCU	<u>SEQ ID NO.525</u> AGCGAAGAUUUGGGGGCCAGUA
Cel-miR-241	<u>SEQ ID NO. 220</u> UGAGGUAGGUGCGAGAAAUGAC	<u>SEQ ID NO.526</u> GUCAUUUCUCGCACCUACCUCA
Cel-miR-242	<u>SEQ ID NO. 221</u> UUGCGUAGGCCUUUGCUUCGAG	<u>SEQ ID NO.527</u> CUCGAAGCAAAGGCCUACGCAA
Cel-miR-243	<u>SEQ ID NO. 222</u> CGGUACGAUCGCGGGGGAUAU	<u>SEQ ID NO.528</u> AUAUCCGCCCGAUCGUACCG
Cel-miR-244	<u>SEQ ID NO. 223</u> UCUUUGGUUGUACAAAGUGGUA	<u>SEQ ID NO.529</u> UACCACUUUGUACAACCAAAGA
Cel-miR-245	<u>SEQ ID NO. 224</u> AUUGGUCCCCUCCAAGUAGCUC	<u>SEQ ID NO.530</u> GAGCUACUUGGAGGGACCAAU
Cel-miR-246	<u>SEQ ID NO. 225</u> UUACAUGUUUCGGGUAGGAGCU	<u>SEQ ID NO.531</u> AGCUCCUACCCGAAACAUGUAA
Cel-miR-247	<u>SEQ ID NO. 226</u> UGACUAGAGCCUAUUCUCUUCU	<u>SEQ ID NO.532</u> AGAAGAGAAUAGGCUCUAGUCA
Cel-miR-248	<u>SEQ ID NO. 227</u> UACACGUGCACGGUAACGCUC	<u>SEQ ID NO.533</u> GAGCGUUAUCCGUGCACGUGUA
Cel-miR-249	<u>SEQ ID NO. 228</u> UCACAGGACUUUUGAGCGUUGC	<u>SEQ ID NO.534</u> GCAACGCUCAAAAGUCCUGUGA
Cel-miR-250	<u>SEQ ID NO. 229</u> UCACAGUCAACUGUUGGCAUGG	<u>SEQ ID NO.535</u> CCAUGCCAACAGUUGACUGUGA
Cel-miR-251	<u>SEQ ID NO. 230</u> UUAAGUAGUGGUGCCGCUUUA	<u>SEQ ID NO.536</u> UAAGAGCGGCACCAUCUUA
Cel-miR-252	<u>SEQ ID NO. 231</u> UAAGUAGUAGUGCCGCAGGUAA	<u>SEQ ID NO.537</u> UUACCUGCGGCACUACUACUUA
Cel-miR-253	<u>SEQ ID NO. 232</u> CACACCUCACUAACACUGACCA	<u>SEQ ID NO.538</u> UGGUCAGUGUUAGUGAGGUGUG
Cel-miR-254	<u>SEQ ID NO. 233</u> UGCAAAUCUUUCGCGACUGUAG	<u>SEQ ID NO.539</u> CUACAGUCGCGAAAGAUUJGCA
Cel-miR-256	<u>SEQ ID NO. 234</u> UGGAAUGCAUAGAACAGCUGUAC	<u>SEQ ID NO.540</u> GUACAGUCUUCUAUGCAUJCCA
Cel-miR-257	<u>SEQ ID NO. 235</u> GAGUAUCAGGAGUACCCAGUGA	<u>SEQ ID NO.541</u> UCACUGGGUACUCCUGAUACUC
Cel-miR-258	<u>SEQ ID NO. 236</u> GGUUUUUGAGAGGAAUCCUUUUA	<u>SEQ ID NO.542</u> UAAAAGGAUUCCUCUAAAACC
Cel-miR-259	<u>SEQ ID NO. 237</u> AGUAAAUCUCAUCCUAAUCUGG	<u>SEQ ID NO.543</u> CCAGAUUAGGAUGAGAUUUACU
Cel-miR-260	<u>SEQ ID NO. 238</u> GUGAUGUCGAACUCUUGUAGGA	<u>SEQ ID NO.544</u> UCCUACAAGAGUUCGACAUACAC
Cel-miR-261	<u>SEQ ID NO. 239</u> UAGCUUUUUAGUUUUCACGGUG	<u>SEQ ID NO.545</u> CACCGUGAAAACUAAAAAGCUA
Cel-miR-262	<u>SEQ ID NO. 240</u> GUUUCUCGAUGUUUUCUGAUAC	<u>SEQ ID NO.546</u> GUAUCAGAAAACAUCGAGAAC
Cel-miR-264	<u>SEQ ID NO. 241</u> GGCAGGGUGGUUGUUGUUAUGGG	<u>SEQ ID NO.547</u> CCCAUACAACAACCACCCGCC
Cel-miR-265	<u>SEQ ID NO. 242</u> UGAGGGAGGAAGGGUGGUUUU	<u>SEQ ID NO.548</u> AAAUACCACCCUUCUCCCCUCA
Cel-miR-266	<u>SEQ ID NO. 243</u> AGGCAAGACUUUUGCAAAGCUU	<u>SEQ ID NO.549</u> AAGCUUUGCCAAAGUCUUGCCU
Cel-miR-267	<u>SEQ ID NO. 244</u> CCCGUGAAGUGUCUGCUGCAAU	<u>SEQ ID NO.550</u> AUUGCAGCAGACACUUCACGGG
Cel-miR-268	<u>SEQ ID NO. 245</u> GGCAAGAAUAGAAGCAGUUUG	<u>SEQ ID NO.551</u> CAAACUGCUUCUAUUCUUGCC
Cel-miR-269	<u>SEQ ID NO. 246</u> GGCAAGACUCUGGCAAACAUUG	<u>SEQ ID NO.552</u> CAAGUUUUGCCAGAGUCUUGCC
Cel-miR-270	<u>SEQ ID NO. 247</u> GGCAUGAUGUAGCAGUGGAGAU	<u>SEQ ID NO.553</u> AUCUCCACUGCUACAUCAUGCC
Cel-miR-271	<u>SEQ ID NO. 248</u> UCGCCGGGUGGGAAAGCAUUCG	<u>SEQ ID NO.554</u> CGAAUGCUUUCCCACCCGGCGA
Cel-miR-272	<u>SEQ ID NO. 249</u> UGUAGGCAUGGGUGUUUGGAAG	<u>SEQ ID NO.555</u> CUUCCAAACACCCAUGCCUACA
Cel-miR-273	<u>SEQ ID NO. 250</u> UGCCCCGUACUGUGUCGGCUGCU	<u>SEQ ID NO.556</u> AGCAGCCGACACAGUACGGGCA

Table 4: Drosophila microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Dme-miR-263a	<u>SEQ ID NO. 251</u> GUUAUAGGCACUGGAAGAAUUC	<u>SEQ ID NO. 557</u> GAAUUCUCCAGUGCACAUUAAC
Dme-miR-184	<u>SEQ ID NO. 252</u> UGGACGGAGAACUGAUAAGGGC	<u>SEQ ID NO. 558</u> GCCCUUAUCAGUUCUCCGUCCA
Dme-miR-274	<u>SEQ ID NO. 253</u> UUUUGUGACCACACUAACCGGG	<u>SEQ ID NO. 559</u> CCCGUUAGUGUCGGUCACAAAAA
Dme-miR-275	<u>SEQ ID NO. 254</u> UCAGGUACCUGAAGUAGCGCGC	<u>SEQ ID NO. 560</u> GCGCGCUACUUCAGGUACCUGA
Dme-miR-92a	<u>SEQ ID NO. 255</u> CAUUGCACUUGUCCCCGCCUAU	<u>SEQ ID NO. 561</u> AUAGGCCGGACAAGUGCAAUG
Dme-miR-219	<u>SEQ ID NO. 256</u> UGAUUGUCCAAACGCAAUUCUU	<u>SEQ ID NO. 562</u> AAGAAUUGC GUUUGGACAAUCA
Dme-miR-276a	<u>SEQ ID NO. 257</u> UAGGAACUUCAUACCGUGCUCU	<u>SEQ ID NO. 563</u> AGAGCACGGUAUGAAGUCCUA
Dme-miR-277	<u>SEQ ID NO. 258</u> UAAAUGCACUAUCUGGUACGAC	<u>SEQ ID NO. 564</u> GUCGUACCAGAUAGUGCAUUUA
Dme-miR-278	<u>SEQ ID NO. 259</u> UCGGUGGGACUUUCGUCCGUUU	<u>SEQ ID NO. 565</u> AACCGGACGAAAGUCCCACCGA
Dme-miR-133	<u>SEQ ID NO. 260</u> UGGGUCCCCUUCAACCAGCUGU	<u>SEQ ID NO. 566</u> ACAGCUGGUUGAAGGGGACCAA
Dme-miR-279	<u>SEQ ID NO. 261</u> UGACUAGAUCCACACUCAUUAA	<u>SEQ ID NO. 567</u> UUAAUGAGUGUGGAUCUAGUCA
Dme-miR-33	<u>SEQ ID NO. 262</u> AGGUGCAUUGUAGUCGCAUUGU	<u>SEQ ID NO. 568</u> ACAAUUGCACUACAAUGCACCU
Dme-miR-280	<u>SEQ ID NO. 263</u> UGUAUUUACGUUGCAUAUGAAA	<u>SEQ ID NO. 569</u> UUUCAUAUGCAACGUAAAUAACA
Dme-miR-281	<u>SEQ ID NO. 264</u> UGUCAUGGAAUUGCUCUUCUUG	<u>SEQ ID NO. 570</u> CAAAGAGAGCAAUUCCAUGACA
Dme-miR-282	<u>SEQ ID NO. 265</u> AAUCUAGCCUCUACUAGGCUUU	<u>SEQ ID NO. 571</u> AAAGCCUAGUAGAGGCUAGAUU
Dme-miR-283	<u>SEQ ID NO. 266</u> UAAAAUACAGCUGGUAAUUCUG	<u>SEQ ID NO. 572</u> CAGAAUUAACCAGCUGAUUUUA
Dme-miR-284	<u>SEQ ID NO. 267</u> UGAAGUCAGCAACUUGAUUCCA	<u>SEQ ID NO. 573</u> UGGAAUCAAGUUGCUGACUUCA
Dme-miR-34	<u>SEQ ID NO. 268</u> UGGCAGUGUGGUUAGCUGGUUG	<u>SEQ ID NO. 574</u> CAACCAGCUAACACACACUGCCA
Dme-miR-124	<u>SEQ ID NO. 269</u> UAAGGCACGCCGGUGAAUGCCAA	<u>SEQ ID NO. 575</u> UGGCAUUCACCGCGUGCCUUA
Dme-miR-79	<u>SEQ ID NO. 270</u> UAAAGCUAGAUUACCAAAGCAU	<u>SEQ ID NO. 576</u> AUGCUUUGGUAAUCUAGCUUUUA
Dme-miR-276b	<u>SEQ ID NO. 271</u> UAGGAACUUAAUACCGUGCU	<u>SEQ ID NO. 577</u> AGAGCACGGUAUUAAGUCCUA
Dme-miR-210	<u>SEQ ID NO. 272</u> UUGUGCGUGUGACAGCGGCUAU	<u>SEQ ID NO. 578</u> AUAGCCGCUGUCACACGCACAA
Dme-miR-285	<u>SEQ ID NO. 273</u> UAGCACCAUUCGAAAUCAGUGC	<u>SEQ ID NO. 579</u> GCACUGAUUCGAAUGGUGCUA
Dme-miR-100	<u>SEQ ID NO. 274</u> AACCCGUAAAUCCGAACUUGUG	<u>SEQ ID NO. 580</u> CACAAGUUCGGAUUUACGGGUU
Dme-miR-92b	<u>SEQ ID NO. 275</u> AAUUGCACUAGUCCCCGCCUGC	<u>SEQ ID NO. 581</u> GCAGGCCGGACUAGUGCAAUU
Dme-miR-286	<u>SEQ ID NO. 276</u> UGACUAGACCGAACACUCGUGC	<u>SEQ ID NO. 582</u> GCACGAGUGUUCGGCUAGUCA
Dme-miR-287	<u>SEQ ID NO. 277</u> UGUGUUGAAAAUCGUUUGCACG	<u>SEQ ID NO. 583</u> CGUGCAAACGAUUUCAACACA
Dme-miR-87	<u>SEQ ID NO. 278</u> UUGAGCAAAAUUCAGGUGUGU	<u>SEQ ID NO. 584</u> ACACACCUGAAAUUUUGCUCAA
Dme-miR-263b	<u>SEQ ID NO. 279</u> CUUGGCACUGGGAGAAUUCACA	<u>SEQ ID NO. 585</u> UGUGAAUUCUCCAGUGCCAAG
Dme-miR-288	<u>SEQ ID NO. 280</u> UUUCAUGUCGAUUUCAUUUCAU	<u>SEQ ID NO. 586</u> AUGAAAUGAAAUCGACAUGAAA
Dme-miR-289	<u>SEQ ID NO. 281</u> UAAAAUUUUAAGUGGGAGCCUGC	<u>SEQ ID NO. 587</u> GCAGGCUCCACUUAAAUAUUUA
Dme-bantam	<u>SEQ ID NO. 282</u> UGAGAUCAUUUUGAAAGCUGAU	<u>SEQ ID NO. 588</u> AUCAGCUUUCAAAUUGAUCUCA
Dme-miR-303	<u>SEQ ID NO. 283</u> UUUAGGUUUCACAGGAAACUGG	<u>SEQ ID NO. 589</u> CCAGUUUCCUGUGAAACCUAAA
Dme-miR-31b	<u>SEQ ID NO. 284</u> UGGCAAGAUGUCGGAAUAGCUG	<u>SEQ ID NO. 590</u> CAGCUAUUCCGACAUUUGCCA
Dme-miR-304	<u>SEQ ID NO. 285</u> UAAUCUAAUUGUAAAUGUGA	<u>SEQ ID NO. 591</u> UCACAUUUACAAUUGAGAUUA
Dme-miR-305	<u>SEQ ID NO. 286</u> AUUGUACUUCAUCAGGUGCUCU	<u>SEQ ID NO. 592</u> AGAGCACCUGAUGAAGUACAAU
Dme-miR-9c	<u>SEQ ID NO. 287</u> UCUUUUGGUUUUCAGCUGUAGA	<u>SEQ ID NO. 593</u> UCUACAGCUAGAAUACCAAAGA
Dme-miR-306	<u>SEQ ID NO. 288</u> UCAGGUACUUAGUGACUCUAA	<u>SEQ ID NO. 594</u> UUGAGAGUCACUAAGUACCUA
Dme-miR-9b	<u>SEQ ID NO. 289</u> UCUUUUGGUUUUAGCUGUAU	<u>SEQ ID NO. 595</u> AUACAGCUAAAAUCACCAAAGA
Dme-miR-125	<u>SEQ ID NO. 290</u> UCCCUGAGACCCUAACUUGUGA	<u>SEQ ID NO. 596</u> UCACAAGUUAGGGUCUCAGGGA
Dme-miR-307	<u>SEQ ID NO. 291</u> UCACAACCUCCUUGAGUGAGCG	<u>SEQ ID NO. 597</u> CGCUCACUCAAGGAGGUUGUGA
Dme-miR-308	<u>SEQ ID NO. 292</u> AAUCACAGGAAUUAACUGUGAG	<u>SEQ ID NO. 598</u> CUCACAGUAUAAUCCUGUGAUU
dme-miR-31a	<u>SEQ ID NO. 293</u> UGGCAAGAUGUCGGCAUAGCUG	<u>SEQ ID NO. 599</u> CAGCUAUGC CGACAUUUGCCA
dme-miR-309	<u>SEQ ID NO. 294</u> GCACUGGGUAAAAGUUUGUCCUA	<u>SEQ ID NO. 600</u> UAGGACAAACUUUACCCAGUGC
dme-miR-310	<u>SEQ ID NO. 295</u> UAUUGCACACUUCCCGCCUUU	<u>SEQ ID NO. 601</u> AAAGGCCGGGAAGUGUGCAAUA
dme-miR-311	<u>SEQ ID NO. 296</u> UAUUGCACAUUCACCGGCCUGA	<u>SEQ ID NO. 602</u> UCAGGCCGGUGAAUGUGCAAUA
dme-miR-312	<u>SEQ ID NO. 297</u> UAUUGCACUUGAGACGGCCUGA	<u>SEQ ID NO. 603</u> UCAGGCCGUCUCAAGUGCAAUA
dme-miR-313	<u>SEQ ID NO. 298</u> UAUUGCACUUUCACAGCCCAG	<u>SEQ ID NO. 604</u> UCGGGCUGUGAAAAGUGCAAUA
dme-miR-314	<u>SEQ ID NO. 299</u> UAUUCGAGCCAAUAAGUUCGG	<u>SEQ ID NO. 605</u> CCGAACUUUAUUGGUCGAAUA
dme-miR-315	<u>SEQ ID NO. 300</u> UUUUGAUUGUUGCUCAGAAAGC	<u>SEQ ID NO. 606</u> GCUUUCUGAGCAACAAUCAAAA
dme-miR-316	<u>SEQ ID NO. 301</u> UGUCUUUUUCCGCUUACUGGCG	<u>SEQ ID NO. 607</u> CGCCAGUAAGCGGAAAAAGACAA
dme-miR-317	<u>SEQ ID NO. 302</u> UGAACACAGCUGGUGGUAUCCA	<u>SEQ ID NO. 608</u> UGGAUACCACCAAGCUGUGUUC
dme-miR-318	<u>SEQ ID NO. 303</u> UCACUGGGCUUUGUUUAUCUCA	<u>SEQ ID NO. 609</u> UGAGAUAAACAAAGCCCAGUGA
dme-miR-2c	<u>SEQ ID NO. 304</u> UAUCACAGCCAGCUUUGAUGGG	<u>SEQ ID NO. 610</u> CCCAUCAAAGCUGGCUGUGAUUA

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Dme-miR-iab45p	<u>SEQ ID NO. 305</u> ACGUAUACUGAAUGUAUCCUGA	<u>SEQ ID NO. 611</u> UCAGGAUACAUUCAGUAUACGU
Dme-miR-iab43p	<u>SEQ ID NO. 306</u> CGGUAUACCUUCAGUAUACGUA	<u>SEQ ID NO. 612</u> UACGUUAUCUGAAGGUUAACCG

On page 27, please delete the first full paragraph and insert in its place the following new paragraph:

The sequences of the 2'-O-methyl oligoribonucleotides were 5'-GUCAACAUCAGUCUGUAAGCUAL (L, 3' aminolinker) for 2'-OMe miR-21 (SEQ ID NO. 613), and 5'-AAGGCAAGCUGACCCUGAAGUL for EGFP 2'-OMe antisense (SEQ ID NO. 614), 5'-UGAAGUCCCAGUCGAACCGAAL for EGFP 2'-OMe reverse (SEQ ID NO. 615); the sequence of chimeric 2'-OMe/DNA oligonucleotides was 5'-GTCAACATCAGTCTGATAAGCTAGCGL for 2'-deoxy miR-21 (underlined, 2'-OMe residues) (SEQ ID NO. 616), and 5'-AAGGCAAGCTGACCCTGAAGTGCGL for EGFP 2'-deoxy antisense (SEQ ID NO. 617).

On page 27, please delete the second full paragraph and insert in its place the following new paragraph:

The miR-21 cleavage substrate was prepared by PCR-based extension of the partially complementary synthetic DNA oligonucleotides 5'-GAACAATTGCTTTACAGATGCACATATCGAGGTGAACATCACGTACGTAAACATCAGTCTGATAAGCTATCGGTTGGCAGAAGCTAT (SEQ ID NO. 618) and 5'-GGCATAAAAGAATTGAAGAGAGTTTCACTGCATACGACGATTCTGTGATTGTATTCAAGCCCCATATCGTTCATAGCTTCTGCCAACCGA (SEQ ID NO. 619). The extended dsDNA was then used as template for a new PCR with primers 5'-TAATACGACTCACTATAGAACAAATTGCTTTACAG (SEQ ID NO. 620) and 5'-ATTAGGTGACACTATAGGCATAAAAGAATTGAAGA (SEQ ID NO. 621) to introduce the T7 and SP6 promoter sequences for in vitro transcription. The PCR product was ligated into pCR2.1-TOPO (Invitrogen). Plasmids isolated from sequence-verified clones were used as templates for PCR to produce sufficient template for run-off in vitro transcription reactions using phage RNA polymerases (Elbashir et al., EMBO 20, 6877-6888 (2001)). ³²P-Cap-labelling was performed as reported (Martinez et al., Cell 110, 563-574 (2002)).

On page 27, please delete the paragraph bridging page 27 and 28 and insert in its place the following new paragraph:

Plasmids pEGFP-S-21 and pEGFP-A-21 were generated by T4 DNA ligation of preannealed oligodeoxynucleotides 5'-GGCCTAACATCAGTCTGATAAGCTAGGTACCT (SEQ ID NO. 622) and 5'-GGCCAGGTACCTAGCTTATCAGACTGATGTTGA (SEQ ID NO. 623) into NotI digested pEGFP-N-1 (Clontech). The plasmid pHcRed-C1 was from Clontech.